REMARKS

Claims 1-10 are pending in the present application. Applicants note with appreciation the allowance of claims 5-8. Claims 1 and 9 are currently amended. Applicants reserve the right to pursue the original claims and other claims in this and other applications.

Claims 1-4, 9 and 10 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,307,195 to Guidash. Applicants respectfully traverse this rejection.

Claim 1, as amended, recites "at least one pixel comprising a photodetector that outputs an output level indicative of incoming light; a first sample and hold element electrically connected to the pixel operating to store a signal output level during a readout operation; a second sample and hold element electrically connected to the pixel operating to store a reset level during a readout operation;" and "a third sample and hold element electrically connected to the pixel operating to store the signal output level during a comparison operation." Claim 1 further recites "an adjusted saturated voltage source, comprising a node that provides an adjusted saturation voltage; and a comparator having a first input node operatively connected to the third sample and hold element, a second input node electrically connected to the adjusted saturation voltage node, and an output node, said comparator operating to output a signal indicating whether the adjusted saturation voltage exceeds the output level from the photodetector." Guidash does not disclose all the limitations of claim 1.

Guidash relates to a "method and apparatus of employing an X-Y addressable MOS imager to obtain increased dynamic range . . . having an array of pixels formed in rows and column[s]." (Abstract). Guidash discloses that after the integration time has elapsed, "the floating diffusion is reset and the reset level is sampled and held. This is reset1 and has an elapsed integration time 1." (Col. 11, lines 41-44). Guidash also discloses that "the charge in the PD is transferred to the floating diffusion and the signal

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level is sampled and held." (Col. 11, lines 44-46). Guidash further discloses that "the FD is reset and the reset level is sampled and held provided reset2, with an elapsed reset integration time 2 that is different than that for reset1." (Col. 11, lines 46-48). Guidash then discloses that "rather than using a comparator to determine if there is a predetermined difference between reset1 and reset2, the actual value of the differences in reset levels could be read out in a similar manner to that used to determine the value of (signal-reset1)." (Col. 11, lines 54-58). According to Guidash, the value of (reset2-reset1) can then be used to determine the effective signal level." (Col. 11, lines 58-60; Fig. 9A).

Guidash is silent on a sample and hold element for storing "the signal output level during a comparison operation," as recited by amended claim 1. Therefore, Guidash discloses the comparison of a different set of voltages than those of the claimed invention. Since Guidash does not disclose all the limitations of independent claim 1, it does not anticipate claim 1. Claims 2-4 depend from claim 1 and incorporate all the limitations of claim 1. Therefore, claims 1-4 are patentable over the reference.

Claim 9, as amended, recites a method for flagging an oversaturated pixel in an active pixel sensor array. The method of claim 9 comprises, inter alia, "reading a signal voltage from a pixel; comparing the signal voltage to an adjusted saturation voltage, wherein said adjusted saturation voltage is set to a minimum signal level; and storing a saturation flag in response to the signal voltage exceeding the adjusted saturation voltage."

As mentioned above, Guidash discloses the use of the value (reset2-reset1) to determine the effective signal level. (Col. 11, lines 58-60). Guidash does not teach or suggest that the signal voltage would be compared to an adjusted saturation voltage "set to a minimum signal level," as recited in claim 9. Since Guidash does not disclose all the limitations of independent claim 9, it does not anticipate claim 9. Claim 10 depends from claim 9 and incorporates all the limitations of claim 9. Therefore, claims 9 and 10 are

patentable over the reference. Applicants respectfully request that the 35 U.S.C. § 102(e) rejection of claims 1-4, 9 and 10 be withdrawn.

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

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